

I. INTRODUCTION

This document consists of housing rehabilitation standards and specifications applicable to owner-occupied rehabilitation projects, including full home replacements, funded and administered through the Pinal County Owner Occupied Housing Rehabilitation (OOHR) Program. The Pinal County OOHR Program Guidelines can be located here: https://drive.google.com/drive/folders/1obdfqdHA_m4apan-la-XDNAm3tBI7UPP

These standards set forth the requirements the housing must meet upon project completion. Section III. applies specifically to housing rehabilitation projects, Section V. applies specifically to housing replacement projects.

II. GENERAL GUIDELINES

- A. Structures including additions or modifications must comply with applicable building codes. Substandard workmanship, unsafe items, or hazardous situations are not acceptable. If repair of these items is not cost effective, as determined by the OOHR Coordinator, the addition or modification may be demolished.
- B. All demolition, additions, alterations, modifications, repairs, or improvements to property(s) and/or structure(s) performed shall fully comply with current Uniform Administrative, Building, Plumbing, Mechanical and Fire Codes, National Electrical Code, and Arizona Revised Statutes as applicable.
- C. Life threatening deficiencies must be identified and addressed immediately. Life threatening deficiencies include:
 - 1. Propane, natural gas, or methane gas detected
 - 2. Exposed wires, open electrical panels
 - 3. Missing electrical breakers or covers
 - 4. Missing or broken outlets, switches, or cover plates
 - 5. Misaligned chimney or ventilation system
 - 6. Water leaks on or near electrical equipment
 - 7. Blocked egress to fire escapes or fire exits
 - 8. Security bars on windows preventing egress
 - 9. Missing or inoperable smoke detectors
 - 10. Other life threatening deficiencies identified by the OOHR Coordinator.
- D. Accessibility standards for housing for physically handicapped persons shall be accommodated as determined by the homeowner and OOHR Coordinator, and, where applicable, shall meet the technical requirements described in the Department of Justice 2010 ADA Standards for Residential Dwelling Units. See Section 233.2 of the ADA Accessibility Standards: https://www.access-board.gov/ada/#ada-233

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- E. Major systems are structural support; roofing; cladding and weatherproofing (e.g., windows, doors, siding, gutters); plumbing; electrical; and heating, ventilation, and air conditioning. Each of the major systems must have a remaining useful life for a minimum of five (5) years, or the major systems must be rehabilitated or replaced as part of the rehabilitation work.
- F. Housing must be improved to mitigate the impact of potential disasters (e.g., earthquake, hurricanes, flooding, and wildfires) in accordance with State and local codes, ordinances, and requirements.
- G. Upon completion, the units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703. The standards outlined in this document reflect the requirements described in 24 CFR 5.703.
- H. Housing must meet all applicable State and local codes, ordinances, and requirements or, in the absence of a State or local building code, the International Existing Building Code of the International Code Council.

Codes for the project service area can be located as follows:

Pinal County

https://www.pinalcountyaz.gov/communitydevelopment/buildingsafety/pages/home.aspx

Town of Mammoth

https://townofmammoth.us/mammoth-land-codes/

Town of Florence

http://www.florenceaz.gov/community-development/

City of Maricopa

https://www.maricopa-az.gov/departments/economic-community-development/building-safety/building-codes

City of Eloy

https://eloyaz.gov/652/Updated-Codes-and-Fees

III. REHABILITATION STANDARDS AND SPECIFICATIONS – All rehabilitation that is performed using HOME funds must meet the following requirements upon project completion:

A. GENERAL HEALTH AND SAFETY

- 1. The unit must have no evidence of electrical hazards, natural hazards, or fire hazards.
- 2. The unit must be able to be entered without having to go through another unit.

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- 3. There must be an acceptable fire exit from the building that is not blocked.
- 4. The unit must be free from rats and/or severe infestation by mice or vermin.
- 5. The unit must be free from heavy accumulation of garbage and/or debris inside and out.
- 6. There must be adequate covered facilities for temporary storage and disposal of food wastes (trash cans with lids or covers).
- 7. Interior stairs must be free from hazards such as loose, broken missing steps on stairways; absent or insecure railings; inadequate lighting; or other hazards such as bare electrical wires or tripping hazards.
- 8. The unit must have proper ventilation and be free of mold, and must not have abnormally high levels of air pollution from vehicular exhaust, sewer gas, fuel gas, dust, and other pollutants.
- The site and immediate area must be free from conditions which would seriously and continuously endanger the health and/or safety of the occupants.

10. Lead Based Paint

- Housing must meet the lead-based paint requirements at 24 CFR part 35.900. Exemptions:
 - Residences that were constructed after January 1, 1978.
 - A zero bedroom dwelling unit.
 - Residences found not to have lead based paint by a lead based paint inspection conducted by a certified lead based paint inspector.
 - Residences in which all lead based paint has been identified, removed, and clearance has been achieved by a certified lead based paint abatement supervisor.
 - Any rehabilitation that does not disturb a painted surface.
 - Residences that are listed or have been determined to be eligible for listing in the National Register of Historic Places. In this case interim controls maybe conducted instead of abatement.
- Other than the exceptions listed above, every unit constructed before January 1, 1978 must be inspected for the presence of lead (exceeding Federal Standards) in paint by a certified lead based paint inspector.
- Lead based paint must be abated in accordance with federal regulations by a certified lead based paint abatement supervisor.
- All wood trim, doors, doorjambs, frames that have lead based paint must be removed and replaced.
- Lead paint on walls or ceilings that is peeling, flaking, or otherwise deteriorated or that will be disturbed as a result of rehabilitation shall

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be completely covered with, at a minimum, ¼" drywall, taped, sanded, primed, and painted.

11. Asbestos

- Materials containing asbestos to be removed as a condition of contract shall be moved and disposed of in a proper and safe manner by a certified asbestos abatement contractor or in accordance with locally approved disposal standards.
- Exposed floor mastic containing asbestos must be encapsulated or removed in those areas where carpet is being installed.
- Unsound tile containing asbestos must be removed prior to installation of a new layer of resilient flooring.
- No asbestos containing materials shall be used for repair, replacement or new installation.

B. SITE WORK

Pest Control

- The building must be free of wood boring insects. If termite activity is
 detected, the entire building shall receive termite pesticide treatment. Where
 detectable, structural damage caused by wood boring insects must be
 repaired. Visible, excessive non-structural damage shall be repaired. Any
 conditions conducive to termite activity, such as wood-to-earth contact shall
 be corrected.
- Each unit must be free of mice, roaches, rats, or other disease-carrying pests. If such pests are detected, extermination must be undertaken until the existing problem has been eliminated.

Walls and Fences

- Retaining walls must be in good condition.
- Excessive cracking, bowing, leaning or heaving must be repaired.
- Cracks and displacements of more than 1/4" must be repaired.
- Walls which lean enough to make the center of the top course fall outside the middle 1/3 of the base must be replaced.
- Retaining walls must have weep holes in sufficient number and size to relieve water trapped behind the wall.
- Fences or masonry walls may be installed.
- Existing fences should be in good repair.
- Holes, broken pickets, torn chain-link fabric, missing top-rails, defective posts or supports, broken or missing masonry units, wobbly gate posts, gates which don't open and close properly, etc. shall be repaired.

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Siting of Building(s)

- The site must allow water to drain away from the foundation and for water to be channeled around the building in a manner capable of draining away heavy rains.
- The site and neighborhood must be reasonably free from disturbing noises and reverberations or other dangers to the health, safety, and general welfare of the occupants.

Pedestrian Traffic

- Walks, driveways, and concrete or asphalt paved pads or parking areas must be free of trip hazards.
- Cracks more than 1/2" in width or any crack that causes a trip hazard must be repaired.
- Walkways and areas subject to pedestrian traffic shall be finished in such a manner as to minimize slip hazards when wet.

Accessory Buildings

- Accessory storage sheds in need of minor repair may be repaired.
- Storage sheds in poor condition may be removed or replaced.
- Storage sheds may be installed if this is a feature in keeping with improvements of surrounding standard projects.

Landscaping

- Installation of new irrigation and sprinkler systems is acceptable.
- Dead trees or shrubs shall be removed.
- Plants that are undermining any structure (i.e. walls, masonry fences, and slabs) or interfering with drainage shall be removed.
- Plants blocking access to electrical panels, windows, doors, sidewalks, or walkways, or interfering with overhead electrical, telephone, or television cables shall be trimmed or removed.
- Plants that are abrading the roof surface shall be trimmed.
- Palm trees having build-up of dead palm fronds, may be trimmed or removed.
- Plants, trees or shrubbery posing personal safety hazards must be trimmed or removed.
- High water use landscaping may be removed or converted to drought tolerant landscaping if this is a feature in keeping with improvements of surrounding standard projects.

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C. KITCHEN

- Each unit must have a working stove.
- Each unit must have sufficient space and facilities for the storage, preparation and serving of food.
- Newly-installed gas stoves must have an approved automatic lighter for all the burners.
- Existing gas stoves shall be free of leaks, clogged burner ports, missing parts
 or any defect that makes cleaning or repair of the stove difficult, or that makes
 part of the stove inoperable or unsafe.
- Electric stoves shall have a power supply capable of providing power for all those heating elements the stove is capable of using at one time. Elements should be capable of producing red heat except in those cases where design prohibits this, as in the case of ceramic elements.
- Electric stoves shall be connected to an approved electrical outlet.
- The dwelling unit must have a permanent ceiling with a sink in proper operating condition, with a sink trap, and hot and cold running water. The sink must drain into an approved public or private system
- The dwelling unit must utilize waste and refuse storage facilities determined by local practice and may include trash cans or dumpster facilities.
- The unit must have a working refrigerator of appropriate size for the family.
- Appliances 10 years or older shall be replaced, the homeowner shall not be allowed to keep/reuse the old appliance. Appliance replacements shall be like for like products.
- All appliances including furnaces, water heaters, refrigerators, dishwashers and stoves should be replaced with Energy Star approved appliances that meet or exceed minimum energy efficiency rating of 80.
- Garbage disposals and dishwashers may be replaced or provided if these features are in keeping with improvements or surrounding standard projects.

D. FINISHES AND SURFACES

- All surfaces, particularly those that can be damaged by water or direct sunlight, shall have a protective finish.
- Paneling, wallpaper, mirror tiles, corkboards, etc. in good condition and not
 posing any form of hazard shall remain in place. Such wall coverings shall be
 replaced only at the sole cost of the owner.
- Loose tiles, broken or missing grout, missing tiles, loose wall panels, delaminating surfaces, and joints without caulking or grout are not acceptable.
- Exterior paint shall be free of excessive peeling, checking, cracking, flaking, blistering or other defects.

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- All new wood shall be primed prior to painting.
- Interior paint shall be in sound condition.
- Paint that is damaged, difficult to clean, peeling, cracking, etc. shall be properly prepared and recoated.
- Exterior and interior paint surfaces should have all holes and imperfections filled prior to applying paint.
- Prime coat is required on all interior and exterior bare surfaces.
- Two coats of paint are required on exterior and interior surfaces.
- Low VOC interior semi-gloss or satin finish latex paint is to be used.
- On exterior surfaces, caulk all intersections of body with windows, doors, and other dissimilar materials.
- Exterior paint to be Low VOC first quality exterior semi-gloss or satin finish latex. Light shades recommended.
- Walls and ceilings shall be in sound condition and free of hazardous defects.
- Cracks in plaster or gypsum wall board surfaces 1/8" or wider shall be repaired.
- Loose drywall, broken plaster, loose paneling, etc. shall be repaired.
- Tape, texture and paint sheetrock to match adjacent surfaces.
- All cabinets and vanities shall be in good condition and appropriately secured.
- Cabinets, drawers, and doors shall be free of broken or dysfunctional hardware, holes, peeling, chipping, sloughing, or any other damage rendering them difficult to clean or otherwise unsanitary.
- Counters shall have a surface that can be easily cleaned and impervious to repeated cleaning.
- Counters shall be free of holes, gouges, burns, peeling, cracking or any condition making them absorbent.
- Replacement countertops should be new pre-formed laminated plastic countertops with bullnose front and 4" backsplash at all adjacent walls. Top to be ascribed to adjacent surfaces. Include end caps and caulking. Properly secure to base cabinets.
- All interior drywall shall be ½" sheetrock, textured and painted with Low VOC interior semi-gloss paint.
- Cabinets should be models approved by the National Kitchen and Bath Assn. and labeled with the manufacturers name and FHA approval.

E. FLOORING

 Floor framing shall be capable of supporting existing dead load and anticipated live loads as defined by the UBC as appropriate for type of structure and class of occupancy. Swales, sags, and ridges that do not

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present a trip hazard or otherwise jeopardize the health and safety of the occupant(s) shall be repaired.

- Flooring shall be in good, sanitary condition and free of any hazardous conditions.
- Flooring in kitchens, bathrooms and laundry areas shall be impervious to water.
- Resilient flooring with excessive gouges, breakage, bubbling, lifting, or shrinking shall be repaired or replaced.
- Wood floors shall be in sound condition and free of excessive damage from wood-boring insects.
- Wood flooring with excessive gouges, breakage, lifting, curling, buckling, or shrinking shall be repaired or replaced with resilient flooring or carpet.
- Carpet that is improperly attached, badly worn, torn, or soiled shall be replaced if the cost of repair is greater than the cost of replacement
- Existing carpet shall be in clean and sanitary condition.
- Carpet may be replaced with resilient flooring, where appropriate.
- Replacement flooring may be carpet or resilient flooring. The county will not replace existing flooring with wood flooring. If applicable, the subfloor must be replaced with ³/₄" plywood. Flooring options include:
- Sheet vinyl
- Ceramic tile if ceramic tile currently exists.
- Carpeting shall be stain resistant residential carpeting with a minimum face weight of 32 OZ FHA approved grade texture style nylon carpeting. Padding should be minimum 7/16", 8lb.
- Ceramic tile shall be repaired, when possible to match the existing tile.
- Ceramic tile requiring replacement shall be replaced with resilient flooring or carpet unless ceramic tile is a feature in keeping with improvements of surrounding standard projects.

F. DOORS AND WINDOWS

- Doors, frames, jambs and casings shall be in good condition and free of excessive scratches, gouges, chipping, peeling or other unsightly damage or wear, and in good working order.
- Doors with holes too large to be repaired, delaminating skins, broken stiles or rails shall be replaced.
- Gaps shall be sufficient to prevent rubbing and no larger than 1/4".
- Entry doors to storage or auxiliary structures may be hollow-core.
- Open joints at windows, doors or other areas shall be caulked and sealed.

Door latches and locks shall operate freely.

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- Hinges shall have no free play.
- The latch-set shall be in good working order.
- Those doors with locksets shall be capable of being locked.
- Existing security doors shall be in good working condition. Security doors not
 in good working condition shall be repaired or removed.
- Latches and locks must work properly and conform to applicable codes.
- Security bars shall not impede the full and proper operation of any window.
- Security bars on windows located in sleeping rooms must be provided with latches and dimensioned so that current code egress requirements are met.
- Security bars not meeting these requirements shall be modified to fully comply or else removed.
- Replacement doors shall be new Energy Star rated pre-hung insulated metal or fiberglass door which includes a double bore lockset & deadbolt.
- Exterior doors shall be protected from sunlight with a proper coating of varnish, paint or other suitable weather protection.
- All doors shall have interior trim.
- Expanding foam caulk shall be used to seal new door frame to the rough opening and threshold.
- All exterior doors shall have a threshold and weather stripping to prevent air infiltration.
- Sliders are to be replaced with Low E dual pane aluminum or vinyl framed slider with lock. Apply necessary threshold or weather stripping to prevent air infiltration.
- Interior doors and closets shall be hollow core doors and painted white with Low VOC interior semi-gloss paint. The closet doors shall be bi-pass 6-panel with track. The laundry room shall include a full bound door for the water heater closet.
- Exterior doors shall have a properly working threshold and shoe or sweep to seal against infiltration.
- Weather-stripping at doors shall be in good repair.
- Open joints at doors shall be caulked and sealed.
- Open joints at windows shall be caulked and sealed.
- Gaskets, glazing compound, caulking, weather-stripping or other weather sealants shall be in good condition.
- All replacement or new windows shall be dual pane low E Energy Star insulated aluminum or vinyl framed slider windows and shall be weatherproofed and stripped to prevent infiltration per IECC 2009 edition standards. The replacement window shall include the appropriate screen, locks, weather stripping, gaskets, seals, caulking, and trim.

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• Unless a bedroom has an operable door that opens and locks to the exterior of the house, bedroom windows shall meet building safety requirements for egress and be a minimum 4 X 4. Should an enlargement of the window be required, the interior and exterior of home shall be finished to match the existing which includes but is not limited to siding, brick work, stucco, sheetrock, texturing, painting, and other necessary work to return the home to the same look. Additionally, the necessary framing and supports must be present to support the new window.

G. BEDROOMS, BATHROOMS AND LAUNDRY ROOMS

- Bedrooms must be a minimum of 81 square feet in floor area with no dimension less than 7 feet.
- Each bedroom must have its own separate access to a common room or area. A bedroom cannot be used as the only means of ingress and egress for another bedroom.
- No more than two persons shall occupy any bedroom.
- Each bedroom equipped with a closet must be equipped with a rod and shelf.
- The dwelling unit must include a proper operating sanitary facility. It must have a flush toilet in proper operating condition and adequate for personal cleanliness and disposal of human waste. It must have a permanent ceiling and be located in a separate room with a privacy door that can be locked.
- In units with more than one bedroom and only one bathroom, a bedroom cannot be used as the only means of ingress or egress to the bathroom.
- Each unit must have at least one shower or tub with hot and cold running water.
- The facilities must use an approved public or private waste disposal system.
- Shower doors should be sanitary and in proper operating condition. If shower
 doors are not constructed of tempered glass, or those with open holes or
 cracks shall be removed and replaced with shower rod.
- Shower and tub enclosures shall be in sanitary condition and properly sealed.
 Walls shall be sound, made of waterproof materials and sealed against water penetration at all joints.
- Bathroom areas shall have at least one window that opens to the outside or adequate exhaust ventilation.
- Each bathroom must have a towel rod, shower rod and toilet paper holder.
- The unit must have a fixed basin with a sink trap, hot and cold running water in proper operating condition.
- Every bedroom shall have at least one window that can be opened and securely locked. If the bedroom is equipped with a door that opens and locks to the exterior of the house, the window does not need to open.

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- All laundry rooms, interior and exterior, should be to code. This may include but is not limited to the installation of sheetrock, tape and texture; installation of Energy Star exhaust fan (minimum 110 CFM); installation of laundry box with shut off valves; installation of vapor proof fixture; and ensure all electrical in not exposed. Dryers shall be vented to the outside using an approved pipe, sleeve, and vent cap. Washers should drain in approved public or private waste disposal systems.
- Replacement tubs should be white porcelain on steel or a two piece fiberglass shower/tub unit. Installation must include but is not limited to a bathtub shower/diverter valve, one piece construction with slip resistant bottom surface, connected to new or existing supply and drain lines including water seal, hardware, and finish. Damaged walls shall be finished to match the adjacent. Caulk walls to ensure a watertight condition with matching silicone.
- Replacement shower surrounds should be cultured marble surrounds with a fiberglass base (shower stalls only). Install green boards on walls. Caulk walls to ensure a watertight condition with matching silicone.
- Replacement vanities due to water damage must be a new factory made and finished oak frame vanity with panel type door complete with a white manmade marble integral countertop and sink including two handle faucets. Install hot and cold water shut off valves at the rear of the cabinet. Scribe cabinet to fit the wall. Furnish and install all moldings to cover openings between vanity and wall. Caulk with paintable latex caulking. Cabinets should be models approved by the National Kitchen and Bath Assn.
- Replacement toilet shall be a white high efficiency water saving toilet with a plastic seat. Plumbing should be included within 3 feet of the fixture.
- Low flow faucet aerators and shower heads (1.5GPM showerhead) must be installed in all faucets and showers. Replacement fixtures shall all be high efficiency water saving devices. Fixtures may be Moen, Delta, American Standard, or Kohler. Stainless steel only.

H. FIREPLACES

- Existing fireplaces can be repaired.
- Fireplace flues shall be free of debris, restrictions, holes, or excessive soot deposits. Flue liners, where present, shall be in good condition. Missing or broken liners shall be replaced.
- Chimneys shall be in good repair and high enough to induce a draft that shall keep smoke from being allowed into the dwelling.
- Fireplaces shall have freely operable dampers, except where gas logs are permanently installed. Gas log installations shall have dampers permanently affixed in the open position.

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The hearth shall comply with current code.

I. ROOF

General

- Roof framing shall be capable of supporting roof and equipment loads without sagging. Roofs with sags, swales, ridges, or uneven pitch shall be inspected and have deficiencies corrected.
- All roofs shall be structurally sound and weather-proof.
- Existing roofs must have an estimated life expectancy of at least 3 (three) years after repairs in order to be considered repairable. Roofs with less than a 5 (five) year life expectancy shall be replaced.
- Repairs shall be done only when the cost for repairs is estimated to be less than the cost of a new roof.
- Roof installations shall have all previous roofing and underlay removed and substrate thoroughly inspected and repaired prior to installation of new system. If the roof system is structurally sound, additional shingles may be installed over existing shingles if not more than one layer is currently installed.
- Every roof must be installed in accordance with manufacturer's specifications.
- Roofs shall have a positive slope that provides good drainage. Minor ponding
 is acceptable if pooling of water less than 1/2" in depth, less than 1/3 the span
 of the roof or capable of drying in less than 48 hours after the last addition of
 water.
- Roofs draining onto others in such a way that excessive wear results shall have protection provided or the drainage rerouted.
- Roof drains must be low enough to prevent excessive ponding and made of materials that are impervious to water. Drains shall be constructed in such a way that they do not drain down the wall of the structure.
- Roof installations shall have all previous roofing and underlay removed and substrate thoroughly inspected and repaired prior to installation of new system.
- Whenever a roof replacement is scoped that involves the removal of the entire decking, the new decking must have a factory installed radiant barrier surface.
- Sheathing should be ½" OSB plywood when not exposed and CCX plywood when exposed under the roofing material.
- All powered attic ventilation fans must be removed, including solar powered and whirly birds.
- Drains shall be constructed in such a way that they do not drain down the wall
 of the structure.

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- Replace fascia. The exterior trim shall be 2" X 6" fascia painted with exterior latex paint. The paint shall be Low VOC paint.
- All new roofs must have a properly installed metal edge on the roof line.
- A roof shall be pre manufactured 24" O.C. trusses with 24" overhangs all around.
- All existing and new gutters should be equipped with downspouts, bottom elbows, extensions, splash/diverter blocks, and other measures necessary to carry the water away from the dwelling.

<u>Flashing</u>

- Roof penetrations must be properly flashed and sealed.
- Cracks forming around the seals of roof penetrations shall be resealed.
- Seals made solely with mortar, plastic roof cement, or other materials that crack or shrink are not acceptable.
- Roof flashing must be properly installed, in good condition, and must serve the purpose for which it was intended. Flashing that is loose, improperly sealed, heavily corroded, or damaged shall be repaired or replaced.

Gutters

- Where appropriate, new roofs shall be equipped with gutter and downspout assemblies.
- Newly installed gutters shall be equipped with the appropriate hangers and be designed to support the weight and conditions of the local area.
- All existing and new gutters should be equipped with downspouts, bottom elbows, extensions, splash/diverter blocks, and other measures necessary to carry the water away from the dwelling.

Built-up Roofs

- Built-up roofs shall have an elastomeric aluminized or gravel coating. Where
 a gravel roof is being replaced, a three-ply built-up system with elastomeric
 coating or other suitable, approved system shall be provided.
- Roof coatings shall be in good condition and consist of compatible materials.
- Excessive peeling, bubbling, chipping, sloughing or mechanical damage shall be repaired.
- Gravel roofs shall have gravel present in sufficient quantity and in proper distribution.
- Roofing membranes shall consist of at least 3 layers. Cap-sheet exposures of more than 18" on roofs without a mineral coating (felt roofs) shall not be acceptable unless a core sample can be shown to have at least 3 layers. The roofing materials must be well adhered to the decking, and each course shall

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- be solid mopped at the laps. Cold process adhesive is not acceptable for roofs with a slope of less than 2-1/2:12
- The roof shall be free of fissures, cracks, lifting seams, excessive bubbles (more than 5% of the roof area) in coatings or asphalt flood coats.

Rolled Roofs

- Cold-application rolled roofing must have a slope of 2:12 or greater.
- Rolled roofing that is applied without hot tar shall be fastened according to manufacturer's specifications.
- New installations and repairs shall have fasteners spaced no more than 3" along the seams and laps.
- Loose mineral surfacing, bare spots, wear, excessive wrinkles, loose seams, loose laps, etc. are indications of age and shall be cause for repair or replacement.
- Rolled rubber roofing is recommended for flat patio roofs.

Foam Roofs

- Foam roofs must have a slope of 2:12 or greater, and have a nominal 1" thickness. Nominal 1" means at least 1" thick with occasional 7/8" measurements acceptable. Ponding of 1/4" or more, or ponding covering more than 5 square feet is not acceptable.
- Foam roofs must have an elastomeric coating in near perfect condition. Any
 detectable break in the coating surface must be repaired. Coatings thought to
 be more than 1 year old shall be recoated.
- Foam roofs must be well adhered to the substrate. Any detectable break in the bond shall be cause for repair. Roofs with poor bonding in areas larger than 3 square feet shall be replaced. Humps, bubbles, ripples and voids are signs of improper application and may be cause for replacement.
- In cases where a foam roof must be replaced, a different acceptable roofing system shall be installed unless a determination is made that the insulating qualities of a foam roof outweigh the associated maintenance costs.

Shingle Roofs

- All newly-installed shingle roofs with a slope of 2:12 to 4:12 shall have double underlayment.
- Existing shingle roofs with slopes between 2:12 and 3:12 must be carefully examined for leaks or other signs of failure.
- Shingles shall be installed with proper exposure. Roofs with more than 1/4" of the un-tabbed portion of the shingles exposed, or not installed in compliance with manufacturer's specifications shall not be acceptable.

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- Roofs with excessive bird's mouths, lumps, breaks, or tears shall be repaired or replaced.
- Fasteners shall be properly installed. Each shingle shall be fastened
 according to manufacturer's specifications. Staples cannot be used to lap
 from one shingle to another, as a substitute for stapling both ends individually.
 In those cases where it is determined that the roof is improperly fastened, the
 roof shall be replaced or repaired, as appropriate.
- Existing shingle roof surfaces shall have substantially all of the original mineral surface and be well adhered both at the tabs and in the grooves.
 Loose mineral surface, sparsely covered surfaces, curling, cupping, breakage, or brittleness are cause for replacement or repair.
- When replacing shingles, special consideration should be given to 'high reflectivity and high emissivity shingles' light shades preferred.
- Replacement shingles shall be #15 felt and 30 year dimensional shingles.

Wood Shake

- The use of wooden roofing materials in roof replacement or new construction is prohibited.
- Existing wood shake roofs must have a slope at least 3:12.
- Wood shake roofs must be in good condition or shall be replaced.
- Underlayments must be present and in good condition.
- Splitting, breaking, rotting or loose shakes, or worn, sloughing, or cracked underlayments should be weighed in decisions about repair and reroofing. If such conditions are prevalent, the roof shall be replaced with another type of material.

Tile Roofs

- Tile roofs that fail shall be replaced with another tile roof only when it is determined the feature is in keeping with improvements of surrounding standard projects.
- Tile roofs in need of replacement shall be replaced with a suitable and more
 economical material when replacement with another tile roof is not in keeping
 with improvements of surrounding standard projects.
- Repairs shall be done only when the cost of repairs is less than the cost of a
 new shingle roof and the planned repairs are expected to make the roof last
 at least another 5 (five) years.
- Tile roofs shall have a minimum slope of 3:12 and be installed over solid decking.
- Spaced slats are not acceptable unless installed over solid decking.
- Tiles shall be in good condition.

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- Tiles shall be securely fastened in place unless specified otherwise by the manufacturer. Slipping, loose, or missing tiles shall be replaced. Tiles cracked all the way through, tiles with a badly weathered surface, or tiles with chips or breaks larger than 2" in diameter shall be replaced. Roofing tiles shall have a head lap of not less than 3" unless the tiles are keyed to lock together with less head lap.
- Leaking ceramic or concrete tile roofs must be inspected to ensure they have an underlayment. The underlayment shall be a minimum of 30-lb. felt and in good condition. Worn, flaking, sloughing, tearing or cracking of underlayment shall be cause for roof replacement or repair.

Metal Roofs

- Metal roofs shall be of 26 gauge (Galvalume) or 29 gauge (galvanized).
- Local codes must verify the minimum required gauge.
- Metal roofs must have a slope of 3:12 or greater.
- Metal roofs must be properly aligned over uniform substructure to avoid panel distortion.
- A moisture barrier shall be installed under new panels.
- New installations must be made with galvanized nails with neoprene washers.
- All rib lap joints must be sealed their entire length with a bead of caulking.

Manufactured Homes

- Repair shall require that elastomeric coating be placed on mobile homes roofs.
- Manufactured home roof replacements where repair is not feasible shall include the removal of existing cooler/vents for the installation of an insulated aluminum roof including: Installation of perimeter frame with 2 X 2. Fill with 1 ³/₄" expanded rigid polystyrene. Cover with .024 white aluminum roof cap. Add metal drip edge.

J. ELECTRICAL

General

- If aluminum wiring is encountered and it has not been previously identified in the project scope. Contractor shall notify the county.
- Electrical connections shall be made in a proper and safe manner. Permanently wired electric water heaters shall be supplied by properly sized conductors installed within metallic flex conduit where exposed.
- Exposed electrical cable serving the furnace shall be protected with flexible conduit and properly made connections. Termination of electrical supply conductors and conduit shall be by means of approved fittings.

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- Exposed cables or wires shall be replaced or protected to meet code.
- Wiring shall be free of damaged insulation or damaged conductors. Fraying, cracking, charring, or brittle insulation on a cable shall be cause for replacement.
- Those portions of any system not exhibiting good workmanship shall be properly terminated and/or replaced in compliance with current code.
- All electrical circuiting shall be of proper design and suitable for intended use, with over current protection suitable for conductor ampacity.
- Electrical fixtures and wiring must not pose a fire hazard.
- Each habitable structure with sleeping quarters shall have a smoke alarm system installed in accordance with local code.

Service Entry and Equipment

- The size of the electrical service shall be adequate for the needs of the property after rehab completion and at a minimum meet National Electrical Code requirements. If an electrical service is inadequate in ampacity to meet the electrical demand, either the service shall be upgraded to meet the new demands, or the electrical demand shall be reduced, if practical.
- Each electrical service shall be properly grounded in accordance with the National Electrical Code.
- Means of disconnects must be provided for fixed electrical space heating units.
 Provisions for disconnect shall be in accordance with National Electrical Code.
- Each electrical panel shall be, at a minimum, adequately sized for the service. All services and distribution centers shall be safe, and free of excessive corrosion, debris, holes, uncapped knockouts, etc. Exterior panelboards enclosures shall be of UL listed, rain-tight design. The panel shall be soundly and properly attached to the wall. Damaged, outdated, unsafe or otherwise unsatisfactory panels shall be replaced with panels that comply with the current code.
- Each electrical panel shall have a main disconnect.
- All circuits shall have overload protection in compliance with current code.
- Although 100 amp is required, a new 200 amp service may be necessary. The new service should include but is not limited to: a new breaker box and distribution breakers per code. Include separate circuits to all kitchen areas, laundry circuit, bathroom and AFCI circuits for bedroom outlets. Remove all unused interior and exterior tubing, visible wiring, and old exterior enclosures and devices. Required junction boxes shall remain accessible but covered with a trim style cover in a workmanship like manner as code permits. Repair all surfaces on interior and exterior affected by the change to match existing surfaces. Label all breakers clearly.

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Branch Circuiting

- An adequate number of circuits to provide safe, functional distribution are required. Additions of circuits to property shall comply with current code.
- Those properties having knob and tube wiring shall be rewired to comply with current code with the guidelines of the U.S. Consumer Product Home Safety Commission. If replacement is more cost effective than repair, then the home shall be rewired.

General Lighting and Outlets

- All rooms shall have a light and at least one convenience outlet.
- Outlets and lights shall be in working order with intact receptacles and switches.
- The Living room and each sleeping room shall have a light and at least 2 working duplex outlets, properly installed and safe for use.
- Light fixtures shall have correct and proper fitting covers or diffusers.
- Where practical, sufficient exterior lighting shall be provided.
- The kitchen shall have at least two 110-volt duplex outlets.
- Appliances requiring a 220-volt shall be connected to a 220-volt outlet.

Ground Fault Circuit Interruption

- At least one ground-fault protected receptacle shall exist in every bathroom.
- Receptacles located at counter top level within 4 feet of the kitchen sink shall have ground fault interrupter protection.
- Exterior outlets shall be extra-duty covered and protected from water infiltration with a bubble cover.
- See National Electrical Code for additional requirements.

Low Voltage and Miscellaneous Systems

- Existing television cable and antenna cable must be in good condition. Damaged cable may be repaired or removed.
- Existing security systems must be in good condition and operable for the intended use. Nonfunctional systems may be removed or replaced if this is determined to be a feature in keeping with improvements of surrounding standard projects.

Complete Rewiring of Electrical System

If the OOHR Coordinator determines a complete rewiring of the electrical system is necessary, the following standards shall be implemented:

 Abandon wiring and completely rewire structure with new three wire grounded system.

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- Remove old wiring if required by code.
- Location of existing switches, outlets, and light fixtures to remain, unless not to code.
- New wiring to allow for all fixtures to be controlled by switches (to be included) and a minimum of three outlets in all rooms except baths, service areas, and non-habitable rooms.
- GFIs in all areas required by code including minimum of kitchen (2), bath (1) and service area (1).
- Work to include replacement of switches, outlets, covers, required GFCI outlets and 110v U.L. Listed smoke detectors interconnected in each bedroom with a battery backup.
- Remove old boxes, visible wiring and tubing. Install new doorbell and chimes including wiring and transformer.
- Repair all surfaces affected by the change to match existing.
- All work shall be to code.

K. PLUMBING

General

- New or replacement piping shall be of approved materials.
- Piping shall be properly installed and supported.
- No plastic piping shall be exposed to sunlight unless it is approved by listing for such installation.
- Each property equipped with facilities for a clothes washer shall have both hot and cold water supplied and drain shall be connected to an approved waste system.
- Faucets, drains, valves, piping and supply lines shall be leak-free, functionally adequate and in proper operating condition.
- Plumbing repairs requiring installation of new fixtures shall be done with water conserving devices including low flow faucets, low flow showerheads and low flow toilets, where appropriate.

Domestic Water Supply

- The dwelling unit must be served by an approved public or private water supply that is sanitary and free from contamination.
- No unit shall have lead water-supply piping. The use of lead solder shall not be allowed for repairs or replacements.
- Multi residential buildings must be provided with backflow prevention devices on the water service, according to applicable code. All exterior hose bibs shall be provided with approved anti-siphon devices.

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Drain, Waste, Vent

- Gray water systems are not acceptable unless inspected and approved by the local building authority.
- Waste lines shall be made of approved materials.
- The waste disposal system shall be connected to an approved public or private disposal system capable of handling the occupant load of the unit(s).
- The system shall be free of leaks, damaged, or corroded pipe. Waste lines shall be free of blockage or gurgling.
- Existing waste systems must be properly vented, have a functional trap, and leak free connections. Vents considered to be inadequate or unsafe shall be replaced or repaired.
- A determination shall be made regarding the need for additional clean-outs for the waste disposal system.
- Waste disposal systems shall be free of health hazards or unsafe conditions.

<u>Gas</u>

- All repair and replacement of gas installations shall be with proper materials and in accordance with local codes.
- The main gas shut-off shall be in good operating condition and free of leaks.
- Flexible gas supply connections shall not exceed 3' in length.
- Flexible gas supply connections shall be appropriately installed.

<u>Fixtures</u>

- Individual sinks, toilets, clothes washers, and other plumbing devices shall have individual water-supply shut-offs.
- All kitchens shall have a sink and faucet, in proper operating condition with a sink trap and hot and cold running water.
- Every bathroom shall be in good operating condition with water supply.
- Faucets shall be free of leaks and drips.
- Sinks shall be free of excessive cracking, chipping or other damage that makes cleaning difficult or hazardous.
- The plumbing shall be free of leaks in supply lines and sewer connections.
- Supply lines and waste lines shall be in good condition.
- Each bathroom shall have a water closet in proper operating condition and connected to an approved public or private sewer system.
- Water closets must be in proper operating condition and free of cracks in the bowl, tank or tank lid.
- Each water closet shall have a washable seat, and be free of leaks in either the water supply or the sewer connections.
- Wall-mounted water closets shall be properly installed and secured.

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• If replacing plumbing fixtures, high efficiency water saving plumbing fixtures must be installed. Fixtures may be Moen, Delta, American Standard, or Kohler. Stainless steel only.

<u>Valves</u>

- Water supplies shall have individual shut-offs, where practical.
- An exterior shut off valve is required.
- Loose or broken handles and levers shall be repaired or replaced.
- Flexible gas supply connections shall be provided with an approved gas cock.

Water Heaters

- Every unit shall be supplied with hot water at a minimum temperature of 120 degrees.
- Gas water heaters shall be properly vented.
- If the water heater unit is located outside, the unit must be protected from the weather and listed for an exterior location.
- Each water heater shall have a properly installed, approved temperature/ pressure relief valve with a 3/4" drain line installed to comply with current code.
- The water heater shall be rigid and properly supported at the proper elevation.
- Flexible gas supplies shall not exceed 3' and all plumbing fittings must be free of leaks.
- Solar water heating devices shall be considered on a case by case basis.
- When replacing an electric water heater in a garage with a home occupancy of no less than 4 people, a Hybrid Heat Pump water heater must be used.
- Replacement water heaters must be upgraded to meet or exceed minimum energy efficiency rating of 80.
- Installation of water heaters should include all plumbing connections, valves and shall be plumb and solid. Install strapping and insulation.
- The installation of new water lines should include the removal and replacement of existing hot and cold lines with new copper, and/or PEX hot and cold supply lines to replace existing fixtures, inclusive of all concealed runs-both vertical and horizontal, supports, diverters, unions, elbows, valves, and associated connections. All wall/ceiling surfaces affected shall be repaired to match existing. All work to be completed per local code.

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L. HVAC Systems

General

- Air conditioning units shall be capable of cooling each room to 30 degrees below the outside temperature.
- Filters shall be secure, clean and appropriate for the unit.
- Heat pumps shall perform to the same standards as refrigeration and heating units.
- HVAC units shall be free of corrosion and water damage.
- Equipment housings and access panels must be intact and properly secured/installed. No exposed electrical connections, belts, pulleys, or blowers shall be allowed.
- The dwelling unit must be able to provide a thermal environment that is healthy for the human body.
- The HVAC system must be in proper operating condition and serviceable.
- The dwelling unit must not contain unvented room heaters that burn gas, oil, or kerosene.

Evaporative Coolers

- All evaporative coolers shall be removed and replaced with a central heating and air conditioning unit.
- All duct work shall be removed and replaced with the appropriate duct work for the new systems.
- The existing duct work shall not be reused with the new system.

Heating

- Every furnace shall be cleaned, serviced, and certified to be safe, operable and adequate and provide a room temperature required by code.
- Each forced air unit shall have a filter.
- Each unit shall be provided with a programmable thermostat which operates both heating and cooling.
- Air handlers shall be quiet, well balanced and clean.
- The heat exchanger shall be in good condition. Excessive corrosion, soot, chemical deposits, cracks, back-draft or burners or other evidence of heat exchanger failure may be cause for replacing the unit.
- All heating elements shall all be connected to a power source and functioning properly.
- Where practical, wall furnaces, which are the main source of heat for the unit, shall be replaced with central heating equipment.

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- A room heater may be used, provided it is used as supplement to central heating, such as in a room addition. Room heaters shall be listed appliances, installed properly and sufficiently sized enough to heat the room in which they are installed.
- Unvented gas heaters, except those designed to be unvented, are not acceptable and shall be replaced with a listed appliance.
- Solar heating systems shall be considered on a case by case basis.

Air Conditioning

- Refrigeration units shall be serviced and certified in good working condition by a licensed mechanical contractor qualified as an air conditioning technician.
- Refrigeration units under the drip line of roofs, or under rain gutters or channels shall be moved or protected from excessive run-off on the unit.
- Condensation drain lines shall drain away from the roof.
- Heat exchange fins shall be in good condition. The compressor shall be free
 of excessive debris. The unit shall be free of excess debris, vegetation or any
 obstruction that prevents the free circulation of air around the unit.

Combustion Air

- Gas furnaces and water heaters shall have sufficient combustion air. In no case shall a proper volume of combustion air be dependent on a door, a window, or any other opening which is prepared for easy closing.
- Newly installed or repaired gas furnaces and water heaters dependent on infiltration for combustion air, shall have available at least 50 cubic feet of room volume per 1000 b.t.u./hour of aggregate input rating.
- Furnaces of water heaters enclosed in spaces too small to provide combustion air by infiltration shall be provided with air in accordance with the current code.
- Furnace enclosures shall be enclosed in a manner that prevents any
 intermingling of combustion air with the recirculating air. Furnace enclosure
 doors, which open inside the building, shall be free of gaps.
- The furnace shall be properly caulked to its floor or platform.
- Each furnace enclosure shall be free of damaged or incomplete walls, floor, or ceiling, which in any way would allow communication of air from the enclosure to the home.

CAZ Tests (Combustion Appliance Zone)

 If the home is occupied during the rehab process a CAZ test must be completed pre and post construction. Post construction shall not exceed BPI maximum CAZ depressurization limits.

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Room Pressure Balancing

No room in the home (including C.A.Z) shall exceed +/- 3Pa of pressure. In
the case where passive return or a live return system must be installed to
correct these issues, the goal should be to accomplish as close to a 0.0Pa of
pressure as possible. Consider the installation of a jump duct or high low
duct.

Air Barrier/Thermal Barrier

- The whole house leakage should not exceed .35 ACH.
- The Thermal Barrier must be installed in complete contact with an effective air barrier, and to IECC 2009 installation standards and levels specific to the climate zone the home is in as defined by IECC Climate map.
- Based upon the results of testing with an infrared camera, Dense Pack Wall Insulation (blown insulation) or spray foam insulation shall be used and should meet an R38 rating in the roof/ceiling and R19 in the walls and under the floor (if applicable). Where practical, properties without insulation in the ceiling, or where the insulation in the ceiling has an R-value less than 11 shall have ceiling insulation added. All insulation shall have 100% contact with the air barrier and be installed with no gaps, voids, air intrusions, compressions, or misalignments.

HVAC Static Pressure

- Static pressure tests must be taken after all work is complete and the pressures must not exceed manufacturer's specifications.
- AC systems should all be verified to have proper charge and airflow by a licensed AC technician.

Air Conditioning

- A Manual J must be completed and followed reflecting any of these listed measures that will be done to that home and the report submitted to the city for any replacement system (1 ton/400 s.f. block homes or 1 ton/550 s.f. of stick built home).
- Replacement HVAC units shall be a minimum SEER rating 14 on all high
 efficiency Energy Star HVAC units including programmable thermostats per
 IECC 2009 edition standards. Unit shall be hooked to existing line sets and
 duct work unless otherwise specified. If replacing a split system, replacement
 must include the condenser and air handler. Furnace may also be required to
 be replaced. Replacement of unit shall also include but is not limited to the
 installation of 1) a programmable thermostat, 2) fused electrical disconnect at
 unit, 3) ensure the service panel has the appropriate designated breaker and

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- 4) necessary electrical wiring for disconnect and panel. For split systems include 1) 220v outlet and 2) drain pan. An upgraded service panel may be required if the existing panel is not sufficient. See ductwork for requirements. If damage is done to sheetrock, this must be repaired to its original state to include tape, texturing, and painting to match existing. Acceptable products are York, Goodman, Trane or Day & Night.
- All replacement split system units should include an air handler and condenser.
- Consider the installation of mini-splits in place of a standard system which requires duct work.

Duct Work

- In the case of a comprehensive duct system replacement in conjunction with an AC replacement, a Manual D report must be followed and a copy of the report should be given to the county.
- Replacement ductwork shall be 26 gauge metal ridged, with R8 flex from the main line to the drop (roof to trunk and return) and service all rooms with a register.
- All accessible joints, seams and connections in the duct system must be sealed using a UL 181 approved duct mastic.
- All Boot-Sheetrock gaps must be sealed.
- All supply or return ducts on the roof that are exposed to direct sunlight must be painted with white elastomeric paint after they are sealed.

Ventilation

- Ventilation for each bathroom shall comply with local codes.
- Ventilation devices not in good operating condition shall be repaired or replaced.
- Exhaust hoods or fans and filters must be in sanitary condition.
- New ventilation must be installed to meet the ASHTAE 62.2-2019 standards.

Furnace

• Every furnace shall be cleaned, serviced, and certified to be safe, operable and adequate. Where practical, replacement furnaces must be upgraded to meet or exceed minimum energy efficiency rating of 80.

M. STRUCTURAL

General

 Damaged or weathered siding shall be repaired or replaced, as appropriate, to ensure structural integrity.

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- Excessive or prevalent broken stucco or stucco with cracks in excess of 3/16" shall be repaired.
- Un-stabilized adobe must be completely protected from weather by a layer of suitable material in keeping with neighboring structures.
- The dwelling unit must be structurally sound and not present any threat to the health of the occupants and must protect the occupants from the environment.
- Ceilings, walls, and floors must not have any serious defects such as severe bulging or leaning, large holes, loose surface materials, severe buckling, missing parts, or other serious damage.
- The foundations and exterior wall structure and surface must not have any serious defects such as serious leaning, buckling, sagging, large holes, or defects that may result in air infiltration or vermin infestation.
- The condition and equipment of interior and exterior stairs, halls, porches, and walkways must not present the danger of tripping and falling.
- Walls shall be constructed with 2" X 6" studs 16" O.C.
- The exterior of the home shall be painted with exterior Low VOC latex paint. A light color palette is recommended.

Concrete

- Foundations and footings shall be sound.
- Repairs at the direction of a structural engineer may be required.
- Slabs shall be free of excessive cracking, movement and trip hazards.
- Cracks or displacement of more than 1/4" in slabs shall be repaired.
- Cracks that have shifted more than 1/4" shall be beveled, filled and the adjoining structural elements examined for weakness or failure.
- New foundations shall include the footing, stem, and slab using 2500 PSI concrete.

<u>Masonry</u>

- Exterior and load-bearing masonry walls shall be in good condition.
- Cracks passing through masonry units, cracks of more than 1/4" in width, cracks caused by lateral displacement of more than 1/4", or half-moon cracks should be examined for structural weakness. Repairs may be required to be undertaken at the direction of a structural engineer.
- Masonry fireplaces shall be in good repair if used as a primary heat source.
- Hoods, walls, chimneys, caps, hearths, firebrick and all other structural portions of fireplace and chimney shall be sound and free of excessive missing mortar, missing bricks or loose masonry.

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Metals

- Grilles or louvers that cover ventilated openings provided for attic or sub-floor ventilation shall be removed and replaced if they are damaged and/or ineffective in protecting against entrance of rain, rodents and/or pests.
- Damaged or weathered metal siding shall be repaired or replaced, as appropriate, to ensure structural integrity and weather-tightness.

Carpentry

- Bearing walls and structures with obvious deficiencies shall be repaired as is appropriate.
- Exposed framing and wood construction shall be examined for structural soundness and good workmanship. Defects shall be corrected.

<u>Stucco</u>

• The exterior walls shall consist of 3 or approved 1 coat stucco over 1" foam and an approved moisture barrier.

IV. ENERGY EFFICIENCY AND WEATHERIZATION

The OOHR Coordinator shall facilitate a pre-construction energy audit from a BPI Certified Professional. The OOHR Coordinator can request that the BPI Certified Professional include a priority ranking of energy items to be addressed in their report. Deficiencies identified in the pre-construction energy audit should be included in the rehabilitation scope of work and corrected during the rehabilitation whenever possible.

The OOHR Coordinator shall facilitate a post construction compliance inspection from a BPI Certified Professional to verify standards included in the rehabilitation scope of work have been completed, as well as to identify any disturbances caused during the rehabilitation work. Failing items should be addressed by the contractor or subcontractor responsible for proper installation. The BPI Certified Professional shall reference the NREL Standard Work Specifications found at https://sws.nrel.gov/ when determining Pass/Fail of installed weatherization measures

Energy audits are not required for full replacement projects.

Standalone weatherization projects not included with other rehabilitation activities should be directed to the Community Action Human Resources Agency (CAHRA) Weatherization Assistance Program.

CAHRA 109 N. Sunshine Blvd. Eloy, AZ 85131

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(520) 466-1112 https://www.cahra.org/contact-us

V. HOME REPLACEMENT STANDARDS AND SPECIFICATIONS

Contractors are required to submit their bids to include the cost for demolition, site preparation, and applicable waste disposal requirements. This is a competitive process and the selected contractor will be considered based upon the lowest most responsive bid provided.

All submitted bids are required to follow the bidding requirements.

The contractor is responsible for following the General Guidelines on page one of this document, and for submitting plans, permits, and a site design/layout for each property to be replaced.

All aspects of this construction shall attempt to make the home as energy efficient as possible.

All fixtures to be installed in the home shall be contractor grade fixtures, unless otherwise specified by the County or as part of the energy efficiency requirements.

Demolition and Site Preparation

- Existing housing structure shall be removed and disposed of in an approved manner. If testing is determined necessary for safe disposal, the contractor shall be responsible for all necessary costs. If possible, the existing home shall remain occupied until the new home is built.
- Clear the lot of all unused structures and concrete slabs and dispose of in an approved manner. The site must be properly graded and conform to the county's requirements for set-backs, drainage, and any other flood control requirements set forth by the county's Planning and Engineering Division.
- The homeowner is responsible for packing all personal belongings prior to the contractor arranging for the items to be removed from the existing home prior to demolition and removal. It is the contractor's responsibility to work with the homeowner to provide a timeline for when items need to be packed.

Masonry and Concrete

- Driveways and/or walkways shall be installed as identified in the project construction plan approved by the OOHR Coordinator.
- Foundation shall be installed as identified in the project construction plan approved by the OOHR Coordinator.

Insulation

• The insulation shall be R-19 batt in the walls and R-38 in the attic.

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Structural

Interior and exterior walls shall be constructed with 2" X 6" study 16" O.C.

Exterior

- The exterior walls shall consist of 3 or approved 1 coat stucco over 1" foam and an approved moisture barrier.
- The exterior of the home shall be painted with exterior Low VOC latex paint, with the color to be selected by the homeowner. A light color pallet is recommended.

Roofing

- The roof shall be pre manufactured 24" O.C. trusses with 24" overhangs all around. The sheathing shall be ½" OSB plywood when not exposed and CCX plywood when exposed with #15 felt and 30 year dimensional shingles. The color, although selected by the homeowner, shall be a light color to promote energy efficiency. The exterior trim shall be 2" X 6" fascia painted with exterior latex paint. The paint shall be Low VOC paint.
- The home shall be equipped with the proper gutters and downspouts to promote water to be drawn away from the home.

Windows and Doors

- Exterior doors shall be an Energy Star rated pre-hung insulated metal door which
 includes a double bore lockset & deadbolt. The door shall be painted with a Low
 VOC exterior paint in a light color to be selected by the homeowner.
- Windows shall be dual pane Low E Energy Star rated insulated aluminum or vinyl framed slider and include a bug screen. All windows should be able to open and lock.
- Interior doors and closets shall be hollow core doors and painted white with Low VOC interior semi-gloss paint. The closet doors shall be bi-pass 6-panel with track.

Sheetrock

• All interior drywall shall be ½" sheetrock with knockdown texture and painted with Low VOC interior semi-gloss of satin finish paint.

Electrical

- Proper inspection of the existing electrical service shall be completed in order to install a new 200 amp service. To the greatest extent possible, appliances and services should be electric.
- Install receptacles, a light and wall switch per code in each room. Include GFCI outlets in the bathroom(s), kitchen and appropriate exterior outlets. Install the

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necessary 220 v outlets for the appliances. Install the appropriate exterior lights per the county code. Install Energy Star exhaust fans in the bathroom(s), minimum 110 CFM.

- Install the necessary phone and television jacks per the plan.
- Install a doorbell for the front door in the hallway.
- Install light fixtures as identified in the project construction plan approved by the OOHR Coordinator. All fixtures shall be contractor grade and shall have CFL light bulbs installed for use.
- Install U.L. listed smoke detectors wired in house circuitry in all bedrooms and hallways and approved locations as required by city code.

HVAC

- HVAC units shall be a minimum SEER rating 14 on all high efficiency Energy Star HVAC units including programmable thermostats per IECC 2009 edition standards.
- Ductwork shall be 26 gauge metal ridged and service all rooms with a register.
 Seal all register vent openings between the metal duct and drywall.

Plumbing

- The new structure should be hooked to an approved public or private waste disposal system.
- Each home shall be provided with a water heater that adequately provides hot water to the home. The water heater shall be a 40 gallon minimum or greater and shall include supply lines and T & P valve. Any new water heaters shall not be solar powered.
- Hot and cold water lines shall supply the laundry room.
- Install new water line from meter to fixtures. Install an exterior shut off valve.
- If on a septic system, replace the sewer line from the septic tank to all fixtures including tap.
- All bathroom fixtures shall be white. The toilet shall be high efficiency water saving devices with a plastic seat cover. Faucets for the sink, shower, tub and the shower head shall be a high efficiency water saving device. The shower/tub shall be a one piece unit.
- The kitchen sink shall be a double stainless steel sink with supply lines, trap and faucet.

Paint

 Low VOC semi-gloss or satin finish paint is required to be used on all paintable surfaces. It is recommended that light shades be used on exterior surfaces.
 Exterior paint should be an exterior latex paint. Homeowner may choose one interior paint color and one interior trim color.

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Flooring

• The flooring products for replacement homes shall be minimum 32 OZ carpet with pad (1/2"), and laminate and vinyl flooring approved by the OOHR Coordinator. The carpeting shall be in the bedrooms and living/family rooms. Laminate flooring shall be placed in the kitchen, entry, and any other high traffic areas. Vinyl shall be placed in the bathrooms. The homeowner shall select the color of each flooring surface. Appropriate doorstops and thresholds must be installed.

Cabinets and countertops

- The kitchen shall include upper and lower cabinets. All cabinets shall be models approved by the National Kitchen and Bath Assn. and labeled with the manufacturers name and FHA approval.
- The approved countertops for the replacement homes shall be:
 - o Kitchen laminate
 - Bath marble integrated countertop with sink
- Bathrooms shall include a tissue holder, towel bar, shower rod, base cabinet with mirror, and bath and/or shower as specified in the project construction plan approved by the OOHR Coordinator.

Termite/pest control

 The finished home shall be treated for termites with a minimum of a one year warranty and an option for the homeowner to renew. A certificate must be provided.

Other

 When applicable, reuse the homeowners existing kitchen appliances. New appliances shall be white Energy Star rated appliances. Appliances required in the home are a refrigerator, stove, and dishwasher.

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